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MARYLAND FISHERIES

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PROPOSED LEGISLATION THREATENS UPPER BAY CRAB SUPPLY

A BILL recently introduced in the House of Delegates of the Commonwealth of Virginia, known as H. B. 371, by Delegate Cadmus, of Portsmouth, contemplates an important change in the crab law of that state, with particular reference to the female egg-bearing or sponge crab. The bill as introduced reads as follows:

> "Be it enacted by the General Assembly of Virginia, That it shall be lawful for any person holding a proper license to take or catch 'sponge' crabs from any of the waters of this State, at any time from April first to June thirtieth, both inclusive, in any year, notwithstanding any provision of any existing law to the contrary.
>
> "Provided, however, that the Commissioner of Fisheries may, when he deems it in the interest of

conservation of said sponge crabs, close the season after giving fifteen days' notice of his intention so to do, such notice, in writing, to be posted at the office of said commissioner and a copy thereof mailed to each inspector."

The Conservation Commissioner of Maryland, realizing the seriousness of this measure and fearing its effect on the crabbing industry of the upper Chesapeake and the thousands of persons engaged in this industry, at once got in touch with Commissioner Richard Armstrong, of Virginia, and the following telegram was dispatched on March 7:

"HON. RICHARD ARMSTRONG,
Commissioner of Fisheries of Virginia,
Newport News, Virginia.

I note in House Bill 371 now before the General Assembly of your State it is desired to make it lawful to take, catch or have in possession sponge crabs from April first to June thirtieth inclusive in any year. The Conservation Department of Maryland feels that such a bill if made a law would seriously affect the crabbing industry of the upper Chesapeake Bay and we must offer our strongest opposition to this proposed change in the crabbing laws of Virginia. This bill would nullify agreement made between the two states to protect the egg-bearing or sponge crab in the waters of the entire Bay. Since the passage of the act prohibiting the taking of sponge crabs in your waters such a marked increase has taken place in this valuable sea food that it represents millions of dollars and gives employment to thousands of citizens in our State. The U. S. Bureau of Fisheries recommended this legislation after their investigation by Dr. Churchill in 1917 and we feel that the bureau would oppose any change which may decrease the supply of this valuable shellfish.

SWEPSON EARLE, *Commissioner.*"

Commissioner Armstrong, in response to this telegram, wired as follows:

"Cannot find any record of agreement mentioned. Would appreciate a wire stating about when this was made and by whom."

On March 8, the Conservation Commissioner replied with the following telegram:

> "Our records show that conference on crabs and fish was held Annapolis November fourteenth, twenty-four, by Governors Trinkle and Ritchie with officials of both states and Government officials. Following this Chesapeake Bay Seafood Committees created and appointed by the Governors. Joint meeting held on Potomac River July fourteen, twenty-five. Agreement reached to protect female crab bearing egg sponge at all times in Chesapeake Bay. Hampton meeting August eighteenth, twenty-five. Effort made to pass resolution to defeat joint committees' recommendations but this failed. Legislation passed Virginia General Assembly twenty-six, had support of Commissioner of Fisheries of Virginia and Seafood Committees of both states. Am forwarding you letter."

A copy of the proposed bill was forwarded to the U. S. Commissioner of Fisheries, Washington, D. C., and the following letter was at once sent to Commissioner Armstrong by Hon. Henry O'Malley, giving the Government's position on the proposed change in the crab law:

"Subject House Bill 371.

MR. RICHARD ARMSTRONG,
Commission of Fisheries of Virginia,
Newport News, Virginia.

DEAR MR. ARMSTRONG:

The Bureau is being called upon to express its opinion of House Bill 371 of the General Assembly of the Commonwealth of Virginia, legalizing the taking of sponge crabs at certain seasons, by any method except that of dredge. I feel, therefore, that I should express direct to you the Bureau's position in this matter.

You will recall the lengthy controversy regarding regulatory measures necessary for the maintenance of the supply of crabs in Chesapeake Bay. On July 13, 1921, a conference was held at the Department of Commerce, called by the Secretary of Commerce, to consider legislation deemed necessary

for the maintenance of the supply of blue crabs in Chesapeake Bay. This conference was attended by the Commissioner of Fisheries of Virginia and the Chairman of the Conservation Commission of Maryland, and certain proposals were agreed upon and the representatives of the respective states agreed that they would seek legislation covering these points as shown by a copy of Fisheries Service Bulletin for August 1, 1921. You will note that the first of these agreements states:

> '1. That it be unlawful to take or have in possession a sponge-bearing crab at any time of the year.'

Subsequently the Bureau made a survey of the condition of the crab fishery of Chesapeake Bay, a mimeographed report thereon being issued in December, 1925. On page 15 of this report you will find the following statement:

> 'The crab industry has not been fully protected to insure a continual commercial supply by any laws so far enacted either in Maryland or Virginia. The closed season on sponge crabs from June 15th to September 1st, in Virginia tends to lessen the strain upon the resource, but during the nine years of the existence of this law the supply has still continued to decrease (see Figures 1 and 2). However, the decrease would in all likelihood have been much greater should the sponge law not have been in effect. In order to protect this class of crab which is so valuable to the future supply measures should be taken to protect the sponge crabs throughout the entire year.'

and on page 16—

> 'In determining the biological value of a certain size of crab we are met with certain difficulties which are at present insurmountable. We may safely conclude that a sponge female has an exceedingly high biological value; and should be protected at all times, regardless of the market value; though we happen to know that the latter is no greater than that of other crabs.'

The Bureau recognizes the well-known fact that there are fluctuations in the supply of such forms of life as the blue crab. For example, real abundance, as indicated by the catch per dredge in Virginia waters, increased 210 per cent from 1917 to 1919, returned to the earlier number in 1921, and increased again 339 per cent by 1923.

In spite of the present apparent abundance of supply of blue crabs, the Bureau believes it to be a dangerous procedure to let down the bars in accordance with the proposals of the bill referred to above, and also believes from past experience in obtaining adequate protective legislation for fish and shell-fish, that when another period of scarcity occurs you will experience no little difficulty in having protective measures restored.

I am at a loss to understand, either from a biological or practical point of view, why such lowering of the bars should be sought, and I would also appreciate hearing from you on this phase of the subject, as to whether you favor the present bill.

With kind regards, I am,

Sincerely yours,

HENRY O'MALLEY,
Commissioner"

Crisfield Crab Packers Protest Change In Virginia Laws Affecting Crabs

The following telegram of protest was received from 17 crab packers and dealers of Crisfield when the news of the proposed change in the Virginia laws affecting sponge crabs was learned:

"SWEPSON EARLE,
Conservation Commissioner,
Baltimore, Md.

We the undersigned crab packers believe any change in the present joint crab law existing between the States of Maryland and Virginia would be detrimental to the crab industry on the Chesapeake Bay.

I. H. Tawes, L. R. Carson, Tawes & Company, W. L. Tull & Brother, W. E. Riggin & Company, Carroll Dryden & Company, Milbourne Oyster Company, Z. Ward & Son, John T. Handy Company, Sterling & Handy, Booth Fisheries Company (P. J. Purnell, Manager), J. C. W. Tawes, Charles W. Howeth & Brother, R. L. Wharton, Murray E. Ward, W. E. Ward Oyster Company, C. A. Loockerman, and Wallace M. Quinn Company."

REDUCE THE COST OF MARYLAND FISH-NETS

By W. T. CONN, *Technologist*, U. S. Bureau of Fisheries

IMPROVED PRESERVATION OF FISH-NETS has long been desired by fishermen and much work with this objective has been carried on by investigators in various countries of the world. Due to the widely varied types of nets and to the many conditions under which they are operated, development of improved preservation has been slow, especially as the only practical tests of material are made in actual fishing waters.

The United States Bureau of Fisheries has taken a leading part in this investigation, having carried on this work for several years, and with the assistance of fishermen, it has been possible to secure tests of improved preservatives in almost every important fishing water in this country, from Maine to Florida, upon the Great Lakes, in the Mississippi Valley, and in Pacific waters.

Recognizing the importance of fisheries in the State of Maryland, tests have been conducted in Chesapeake Bay, with the cooperation of Clarence M. Harrison, of Fairbank, at his fish-traps off Kent Shores, and in the ocean where test material has been exposed by Elliott Brothers, of Ocean City, at their traps.

For general consideration of preservation, fish-nets may be divided into heavy gear, comprising traps, pounds, fykes, and seines, and light gear, comprising gill and trammel nets.

According to the latest information available* there are operated within the State of Maryland 3,379 heavy nets valued at approximately $507,000, and 3,609 light nets valued at ap-

* U. S. Bureau of Fisheries Statistical Bulletin No. 648 and "Fishery Industries of the United States, 1930," by R. H. Fiedler, Appendix II to Report of the Commissioner of Fisheries for the Fiscal Year 1931.

proximately $52,500. From knowledge of Maryland waters, it is doubtful if these nets have a useful average life of over one and one-half years. If this rate of depreciation is accepted, it will be seen that replacement of this gear is costing Maryland fishermen over $350,000 each year. Some of this loss is caused by storms and other physical violence and is unavoidable. Other losses may be materially reduced by intelligent selection and care of material.

Investigation by the Bureau of Fisheries has proved that one very important factor in prolonging the average life of heavy nets is the use of cotton twine which has been dyed by a special method. In tests at Kent Shores in 1931, 15-thread cable cotton, dyed by this process and covered with coal tar, had an average breaking strength of 36.6 pounds after being in the water from June to December; the same twine without the dye, covered with the same tar and exposed beside the dyed twine, had a final breaking strength of 15.9 pounds.

One other important factor in prolonging the life of heavy nets is the use of good coal tar properly applied. Fishermen have been buying poor grades of tar and applying it at high heat. Either of these errors results in loss which is often serious and sudden.

Lists of concerns who will supply the proper coal tar and net manufacturers prepared to furnish the special dyed webbing will be sent without cost to fishermen if they will address the Bureau of Fisheries, Washington, D. C.

Apparently the most important factors affecting the life of gill-nets are thorough cleansing of the nets after each fishing operation, and proper storage even for short periods. Many fishermen leave gill-nets exposed to the weather when not in use. In extensive experiments carried on by the Bureau of Fisheries at Reedville, Virginia, in 1930, it was found that one hour of direct sunshine rotted gill-nets as much as soaking 23 hours in Chesapeake Bay. It has been found that lime water is an excellent wash for gill-nets after they have been fished. It is, therefore, recommended for increasing the average service of gill-nets, that they be washed in lime water (about 1 pound slaked lime in 8 gallons of water), rinsed in clear water, dried and then stored loosely, hung up in well-ventilated dry shade. Under certain conditions, chemical preservatives add to the life of gill-nets. Information concerning preservatives for light nets may be procured without cost by addressing the Bureau of Fisheries, Washington, D. C.

PRODUCTION METHODS MUST LEAD TO BETTER MERCHANDISING

From *Fishing*

AS WE SURVEY PRESENT CONDITIONS, and compare them with the record of the past decade, it becomes increasingly apparent that the fisheries are entering very definitely into a new era—an era in which production will become more stabilized and merchandising will reach a new stage of development.

During the past 10 years most of the effort in the fisheries has been placed upon production. The aim was to bring in fish, and more fish, and the extent to which production was increased is illustrated by the record of landings at the Boston Fish Pier. The figures show that since 1922 the volume there has increased almost 300 per cent. Ten years ago, in January, there were 5,637,246 pounds of fish landed in Boston. In January this year the catch was 13,486,538.

Of course the big jump in production had a tendency to bring prices down. Ten years ago we find an average price of 5.4 cents at the Boston Fish Pier compared with 3.3 cents this year. But high production alone did not bring down prices. The widespread business depression and the sharp downward trend in all commodity prices was reflected in the fishing industry.

Today the producers are not concerned with ways and means to increase their catch. They are trying to find out how to get a fair price for what they send to market. They have shifted from a producing attitude to a merchandising attitude and it is in that frame of mind that problems of today and tomorrow are going to be approached. Leaders in the industry are trying to see how their production methods affect their merchandising.

For instance, there is R. C. Trube, of the Bay Fisheries Company of Galveston, Texas. He believes that production methods can be improved to the end that merchandising may be benefited.

"A handicap that exists in the sea-food industry on the Texas coast," says Mr. Trube, "lies in the careless handling of sea foods as and when taken from the waters and thereafter

by dealers. It starts from the fact that small, undersized products are taken without regard to market requirements and too often they are carelessly handled and iced by fishermen and dealers alike, permitting the entrance into the markets of unsightly, mashed, crushed, boat-scalded and underweight sea foods."

Mr. Trube's criticism, however, is of the constructive type. He is ready with definite suggestions for improvement.

"A great many handlers," he says, "and more particularly individual boat operators, use recoopered containers which may have been used prior thereto for the transportation of products that spoil the color, flavor and odor of sea foods. This abuse could be remedied by the transportation facilities refusing to handle sea foods in other than new containers. So far as the fishermen, boat operators, and producers are concerned, more care must be exercised in the handling of fish; more ice used; better washing and cleaning; and the suspension of the forking of fish. This last item of spoilage could be avoided by the use of mechanical handling facilities."

Poor quality has been a serious obstacle to price in Texas, says Mr. Trube.

"During the past three years," he says, "the fishing industry in Texas has suffered from the efforts of politicians to establish a contact therewith that would permit of pilferings and governmental handicaps such as is experienced in other industries, but without success; and the industry is fairly free from the embarrassment that this association invariably brings. The State of Texas, however, through the passage of a legislative bill, made commercial fishing in the Galveston Bay district, illegal; forcing the commercial fishermen of littoral fish into other open Texas waters, and the shrimping activities into the Gulf of Mexico.

"This has tended to improve the grade and quality of the shrimp produced on the entire coast and has laid the production of littoral fish altogether in areas on the coast both east and west of Galveston. While the quality of the shrimp has been improved, there has been no reflection of this in the purchasing markets because of the offering of inside or bay shrimp from other localities—such inside or bay shrimp being produced at a very much less cost than would make gulf fishing profitable. These offerings of undersized, soft-shelled and inferior-flavored shrimp have tended to further reduce the

demand, producing a consequent unsatisfactory demand and price base. While the Texas Coast, during 1931 and the early part of this year, has produced a relatively smaller amount of sea food than in prior years, the markets did not respond. The coast industries are all offering their production as forced-price basis; with little or no demand from distributing markets."

Frozen Stock Carelessly Handled

What about merchandising developments during the past year? Well, Mr. Trube says:

"No revolutionary improved methods of merchandising were developed during the year, so far as we have been able to learn. Most of the frozen stock in the marketing centers is, and has been, handled in the usual careless and improper manner, being frozen in large lots without regard to thickness of each lot, nor lapsed time in freezing exterior and interior thereof, resulting in break-down of tissue, bad odor, color, and desiccation. This in turn tends to decrease the demand that would exist if a presentable article were offered the public. It is considered that the purchasing public would receive with enthusiasm an attractively and properly packaged sea food in, say, pound packages; in turn packaged in such units as would not embarrass the distributor or retailer, and provide some means for making the outside of the package free of moisture and odor. If such an item were offered in the frozen state, a quantity not in excess of two days' sale by the retailer would prove the most desirable unit."

Price levels are unsatisfactory to producers in every section. But is this weakness in price also evident in the retail market or is there too great a spread between the price paid to the producer and the price paid to the retailer?

There is some feeling that the latter is true. A reader of *Fishing* suggests that wholesale prices of fish be broadcast to the buying public so that the housewife may know exactly what a fair retail price would be. Such a move would benefit the producer, the wholesaler and the consumer, argues our correspondent.

In this connection it is interesting to note that in Nova Scotia, the fishermen are demanding a federal investigation of the spread between the producers' price and the retail price of fish.

Proper control of fish prices and an equalization of the spread now existing between the fisherman and the retailer is essential to the continued operation of the industry, President Hanlon, of the United Maritime Fishermen, declared, and his organization will seek to provide for this by requesting the establishment of a Dominion Marketing Board which will have full authority over price matters.

"It is an amazing thing," Mr. Hanlon stated, "that in all parts of Nova Scotia today Western beef is selling at lower prices than Nova Scotia fish products."

NEW PATROL BOATS INSPECTED

DURING FEBRUARY and early March the Commissioner made an inspection of boats and conditions on both the Eastern Shore and Potomac River. The new type of fast patrol boat, which the Department secured for certain districts last fall, has worked out very satisfactorily, and violations have been reduced to a minimum in such districts.

A number of arrests were made in Potomac River for hand-scraping in the daytime as well as at night. These violators included watermen from the Eastern Shore working in Potomac and certain Virginians from Colonial Beach. In all cases appeals were taken and bond given. Several of the cases will come up in the May term of Court at La Plata, Maryland, and others will come up in April in Westmoreland and King George Counties, Virginia.

MARYLAND FISHERIES

PUBLISHED BIMONTHLY BY CONSERVATION DEPARTMENT,
SWEPSON EARLE, Commissioner.

No. 15

MARCH, 1932

A THREAT TO THE CRAB

IN THE ANNUAL REPORT of the Conservation Department, issued in January, considerable space was devoted to the crab industry of Maryland. It was shown that from some 35,000,000 crabs caught in 1926, the production had increased to approximately 100,000,000 during the season of 1931. This great increase was attributed largely to the passage of a law in Virginia in 1926 preventing the catching of the female crab bearing the egg sponge, or the crab that is about ready to produce young. The State of Maryland passed similar legislation and the sponge crab has since been receiving protection in the waters of both states.

Now comes along a bill that was offered in the General Assembly of Virginia to reverse this law and permit any person holding a proper license to take or catch sponge crabs from any of the waters of that state at any time from April 1 to June 30, in any year, notwithstanding any provision of any existing law to the contrary.

The Conservation Department of Maryland believes that if this bill becomes a law, the work of years on the part of conservation officials of the two states will be nullified. Virginians sponsoring the bill claim as their reason that crabs are so plentiful at this time and crab meat so cheap that it hardly pays to ship it.

To again permit the catching of the sponge crab and the destruction of the eggs at a time when they are about to hatch is more than a backward step—it would probably put the State of Maryland out of the crab business!

Prior to 1926 the crab supply in Maryland was so depleted that very few crabs were taken above the Great Choptank River, and watermen had to engage in other pursuits for a livelihood during the summer months.

In 1931, when the depression was so serious in every other line, and farming interests were particularly hard hit by overproduction, the crab gave a livelihood to thousands of men and women in the State of Maryland, as well as in the State of Virginia.

The Conservation Department of Maryland cannot stand by and see this measure passed without the most strenuous objection, and will do its utmost to prevent such a law being placed on the statute books of our sister state.

If the Hampton interests fear overproduction in the crab industry, the way to deal with it is not by destroying crabs, but by creating a greater demand for crab meat. The government figures show that some 67% of the crab meat used in the United States is imported. It is certainly not unreasonable to feel that a part of this amount at least may be supplied from native crabs. Quick freezing methods such as are employed in the handling of shrimp on the Gulf Coast and broader advertising by the packers will assure a wider distribution of the Chesapeake Bay crab. —SWEPSON EARLE.

THE TROUT SEASON OPENS APRIL FIRST!

The season for trout in Maryland will again be open the first of April, and anglers who visit the trout streams of the State on that day will find them well supplied with fish, as the Conservation Department has stocked all the important ones with trout ranging in size from 7 to 18 inches.

TRAFFIC SIGNALS FOR FISH

F. O. MCMILLAN, an electrical engineer of the Oregon State College, working in cooperation with light and power companies, the Bureau of Fisheries and other agencies, has developed an electrical device to keep salmon, trout, and other fish in the main stream and prevent them from wandering off into irrigation ditches and other places where they may be killed.

The *Literary Digest,* in describing the device, states: "To electrically control fish traffic may seem like wasted effort and misapplied energy, but in our present crowded civilization, conservation and use of natural watercourses, coupled with our need of fish for canneries and food supplies, the problem of how to save the reckless fish that wander off the main highways is a real one.

"Every year millions of game-fish are carried out on the fields and left to die because they have followed some irrigation canal instead of the main-stream channel. Many others are killed by mechanical devices that exert sudden pressures, such as hydraulic turbines.

"There are numerous barriers along the Pacific coast streams to keep the young fingerling salmon from detouring into irrigation ditches, but the trouble is that these wire barriers must be so small, at least a quarter of an inch in mesh, that they become immediately filled with leaves and water debris, and clog up and stop the flow of water.

"Mr. McMillan became interested in applying electricity to the water in a way that would gently shock the salmon and trout into keeping in the main streams. He applied his methods in the waters about the Bonneville Hatchery, in Oregon. With electrodes in the water across the mouths of irrigation ditches where traffic to fish was to be closed, he turned on 24 volts. Almost instantly the fish avoided this water. The traffic signal was against them.

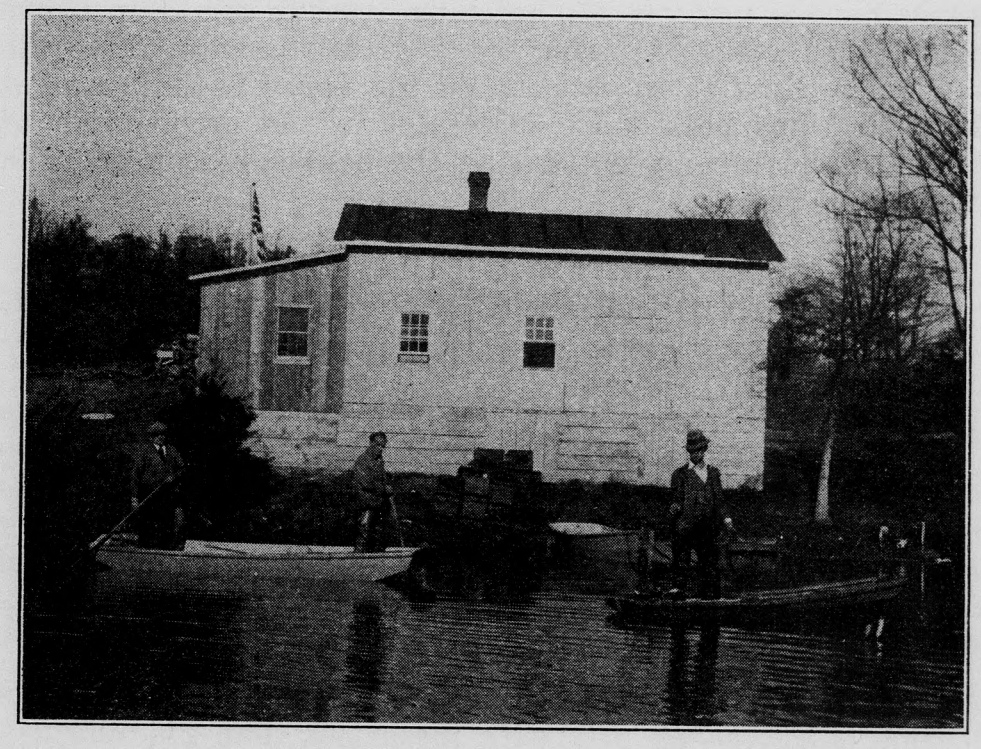
"With 2,000 chinook-salmon fingerlings swimming about, he saw them turn away when coming within a foot of the charged water. With 12 rainbow trout the same thing happened. An odd thing occurred that helped him to know that his method was correct. The fish were feeding on beetles which frequently drifted into the electrified waters. Would the salmon pursue them past the traffic signals? They would not.

"It is believed that this method will save thousands of fish for food besides ridding the farmers of a serious bit of trouble in caring for the dead fish that are caught when the irrigation streams are turned about and the water soaks into the ground. In the natural streams where the tests were carried forward under many conditions, it was found that whole schools of fish drifting along with the water, and then suddenly coming in contact with the signal devices, would be warned by the leaders, who would in some strange way pass the word back, and they would all turn as smoothly as a motor-traffic parade upon reaching a curve in the street with the red light before them."

The Conservation Department is considering this method, as it may be able to utilize the device in connection with one or two of its commercial hatching stations.

THE SPRING FISHING SEASON IN CHESAPEAKE BAY

IT IS SOMEWHAT EARLY to predict what will be the results of the shad season of 1932. From all indications, following a very unusual January, which, according to the Weather Bureau, was the warmest January for 115 years, it was thought that fish would commence to run sooner this year than heretofore. However, February came along with nearly normal weather, and the first part of March has been very blustery.



Spawn Taking Started March 2 At Severn River Perch Hatchery

The reports received thus far from Virginia do not indicate a very heavy run of shad in the Chesapeake Bay up to this time, although the fishermen have their nets all placed in anticipation of a big catch of shad and herring.

Last year, due to heavy easterly weather conditions, which prevailed throughout much of the shad season, these fish were more plentiful in the Potomac River than on the eastern side of the Bay. George W. Parks, superintendent of the State's commercial fish hatching stations in Maryland, has already visited the Eastern Shore stations at Crumpton, Denton, Rock Hall, and other points, and everything is in readiness to begin hatching operations as soon as shad start to run up the Bay.

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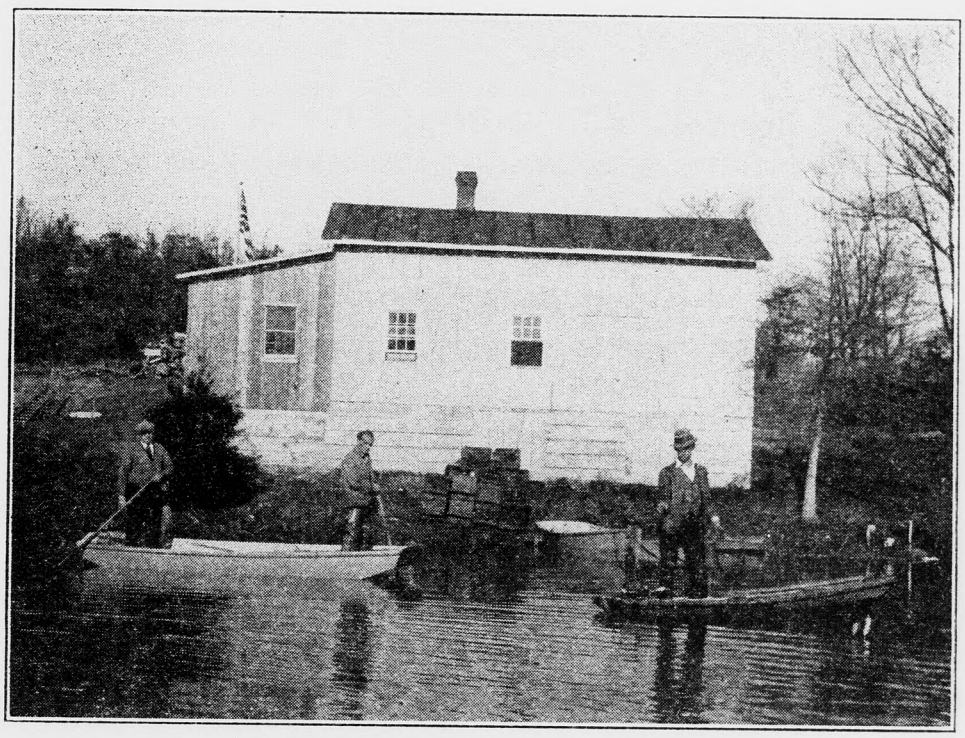

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Yellow perch started to spawn on the second day of March in upper Severn River, where the Department has a very successful hatching station; in fact, this has developed into the most important tributary in Maryland for the propagation of yellow perch. In 1930 as many as 362,880,000 yellow-perch fry were distributed from this station into the waters of the State. During the following summer of 1930, the great drought occurred, and in the early spring of 1931, the water in the upper Severn was still very salty, which accounted for the decline in output from this station last year. The spawn takers have as many as 250 hatching boxes in operation at one time, which makes a string for a great distance above the hatchery. Next to the station on the upper Severn, that at Rock Hall has been most successful in the propagation of yellow perch, turning out during the banner season of 1930, 122,000,000 fry.

NEW REGULATIONS GOVERNING SHAD AND HERRING SEASON GO INTO EFFECT

THE ACTS of the General Assembly of 1931 changed the opening of the shad and herring season in Chesapeake, below Poole's Island (except Potomac River), from March 1 to February 1, because it was found that herring were coming into Maryland waters in February, and the Department offered no objections when a bill was offered in the Maryland Legislature to advance the season one month.

With the opening of the season new sizes for mesh in nets became effective—all nets with mesh less than 2¼ and 2½ inches being unlawful.

In the Potomac River the season remains the same—March 1 to May 31, which is also the season for Chincoteague and Sinepuxent Bays, while in the Bay and its tributaries **above** Poole's Island the season begins March 15 and ends June 10.

FISHERIES COMMISSIONERS CONFER AT VIRGINIA CAPITAL

COMMISSIONER EARLE, of Maryland, met Commissioner Richard Armstrong, of Virginia, on February 18 to go over certain matters affecting the fisheries of Potomac River and certain bills pending before the Virginia Assembly, in session

at the present time, which may affect the fisheries of the upper Chesapeake.

The Potomac River situation was discussed at this time, and it was found that no sentiment existed in Virginia to reopen this river to dredging. It was agreed by the two Commissioners that they meet early in May, after the close of the oyster season, and, together with their local deputy commanders and inspectors, carefully inspect the oyster bars of the Potomac. Another inspection will be made about November 1, in order that a report may be presented to the Maryland Legislature when it convenes in 1933.

EFFECTS OF THE MARCH STORM ON STATE AND OYSTER BOATS

THE STORM which visited Maryland on Sunday, March 6, with a northeasterly gale and rainstorm, followed by shifting winds to the northwest with snow and sleet, without doubt was the worst storm for many years. Reports have reached the Conservation Department from tide-water Maryland of the destruction wrought by the storm among small craft and shipping in general in the Bay.

The flagship of the Department's fleet, the "Gov. R. M. McLane" was dispatched on Monday to rescue the schooner "Neal," which was in a helpless condition off Benoni's Point in the great Choptank River. The captain of the "McLane" found it impossible, due to high seas, to take off the captain and crew of the "Neal" until Tuesday morning about 7 o'clock. The schooner, which had her sails blown away and was otherwise disabled, was not brought to Cambridge until the following morning.

The bugeye "Emma Faulkner," well-known throughout tide-water Maryland, foundered in the Little Choptank River and her captain and one member of the crew perished endeavoring to get ashore in the yawl.

The Maryland Patrol Fleet boats were well cared for with suitable anchors and moorings, with the exception of the "Brown Smith Jones," which was anchored in the mouth of Big Annemessex River. Her chain parted in the storm and she went ashore and up to the present time, March 13, had not been floated. The extent of her damage is uncertain also.

The patrol boat "Fishing Bay" broke from her moorings and was also sent ashore, but was only slightly damaged. Inspector Carbin Simmons in charge of the local boat off Hooper's Island stated that the bugeye "Neva Lawson" dragged into the Department's boat and broke her cable and the boat struck the steamboat wharf, where she would have been destroyed had he not cut a hole in her bottom, so that she could sink.

The Conservation Department sent out a special letter to all deputy commanders for a report on the effects of the storm on their boats as well as oyster craft in their respective districts, and up to March 12, the following information was received:

Herring Bay District—Captain Rodgers reports all boats safe.

Solomon's Island—Captain Oberry, of the "West River," reports three oyster boats went ashore in that vicinity, but otherwise no damage was done to boats by the storm.

Lower Potomac River—Captain Cullison reports his boat safe, although she broke loose from her moorings and was saved by anchor. One bugeye from Virginia, about 1,000-bushel capacity, went ashore. At St. George Island a number of boats were reported as having gone ashore and some sunk. All the oyster boats around St. Mary's River were sunk or went ashore. The oystermen in that vicinity are endeavoring to put their boats in shape, and no oystering has been done during the week. A number of fishermen did not have their nets down and therefore were saved that loss.

Deal's Island—Chief Inspector Townsend stated that many boats were lost or severely damaged when driven ashore during the storm. Just how much this loss will be is not known.

Upper Fishing Bay—Captain Benjamin Kirwan reports that his boat was safe from injury, but three gasoline boats went ashore. Some pound-nets were damaged. The effects of the storm in Lower Fishing Bay were more severe. A number of boats went adrift.

Honga River—Inspector Augustus Adams in the upper part of the river reports about 30 boats broke loose from their moorings and some went ashore and some were sunk. In the lower part of the river Captain Simmons reports from Hoopers-

ville 20 boats dragged ashore, some of which were completely wrecked.

Little Choptank River—Captain Bromwell reports that the "Calvert" was safe and damage in this river not very great.

Great Choptank River—Captain W. J. Haddaway stated the patrol boat "Queen Anne" and auxiliary "Tred Avon" were safe from the storm, but 20 boats were dragged ashore and some were filled with water and the motors damaged. He feels the extent of the damage will not be so great, however.

Oxford—A number of boats reported damaged, but correct check-up has not been made at this time.

Kent Island Narrows and Jackson Creek—A report states that 20 boats were pretty badly wrecked, some of which had the bottoms torn off and others the sides smashed in.

Upper Bay, Rock Hall District—Captain Akers reports 2 buy-boats and 30 other boats went ashore and 12 sunk.

All deputy commanders were instructed to give what aid they could to the disabled oyster fleet, in order that they may resume operations on the bars. Indications are that the shell stock in most oyster houses is about exhausted, as the entire week following the storm was a blank one so far as working on the rocks was concerned, due to the continuance of high winds.

In a report from Capt. E. A. Taylor, of the "Nanticoke," he states that he had to run up the Nanticoke River and found a suitable place where he kept the boat running slowly head to the wind in order to save her.

Capt. Miles reports the patrol boat "Patuxent" was saved by an additional anchor.

Upper Potomac—Capt. Wise reports the "Kent" safe, but that about 25 boats were blown ashore during the storm. Also a number of tenders and skiffs were lost. He also reports that most all the fishermen lost their nets, and that the very low tide since the storm has caused oyster bars to become dry, and he fears that a lot of the young growth will be killed.

Late report from Capt. Alonzo Bozman, of the power boat "Somerset," is as follows:

Boats that went ashore on Deal's Island during the storm,	38
Crisfield,	100
Champ,	10
Rumbly,	20
Annemessex,	8

Capt. Robert Parks, of Crocheron, reports from lower Fishing Bay 30 boats that sank at anchor and dragged ashore.

REGIONAL COUNCIL OF IZAAK WALTON LEAGUE MEETS IN HAGERSTOWN

ONE of the largest Izaak Walton gatherings ever held in Maryland took place at Hagerstown on March 10, when the Regional Council of Maryland and the District of Columbia held its convention at the Hotel Alexander. The meeting began at 10 A. M. and ended with a banquet that evening, with 395 members and guests present. The members of the convention were the guests of the Hagerstown and Williamsport Chapters of the Izaak Walton League.

The speakers at the meeting included Dr. W. B. Holton, of the American University, Washington, whose subject was "Pollution"; Glen C. Leach, of the Bureau of Fisheries, on "The Economic Value of Black Bass"; Carl Shoemaker, Special Committee on Wild-Life Resources, U. S. Senate, on "The Work of the Committee"; as well as talks by F. W. Besley, Maryland State Forester, Swepson Earle, Conservation Commissioner, Myer Rosenbush, Seth E. Gordon, president of American Game Protective Association, Edward C. Kemper, Raymond H. Miller, E. Lee LéCompte, and Dr. Lewis Radcliffe, of the U. S. Bureau of Fisheries. Dr. M. D'Arcy Magee, of the Washington, D. C., Chapter of the Izaak Walton League, presided.

Additional speakers at the banquet included the following: Hon. Henry O'Malley, U. S. Commissioner of Fisheries, Swepson Earle, Paul G. Reddington, U. S. Biological Survey, E. Lee LéCompte, Seth E. Gordon, Dr. M. D'Arcy Magee, and Talbott Denmead, U. S. Game Warden. Mr. E. B. Carl of the Hagerstown Chapter presided, and the Reverend Mr. Hess acted as toastmaster.

All those present were invited to a luncheon at the Woodmont Rod and Gun Club as the guests of Mr. Henry P. Bridges, secretary, the following day, and about 45 accepted.

Other members of the Conservation Department attending the meeting, besides the Commissioner and Mr. LéCompte, were H. H. Johnson, chief clerk, and H. Smith Kolmer, secretary to the Game Division.